



Appl. No. 10/626,303  
Amdt. dated August 19, 2005  
Reply to Office Action of June 14, 2005

PATENT

**Amendments to the Claims:**

Please amend claims 32 and 33, and cancel claims 24 and 41-70. This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-31 (canceled)

32 (currently amended): A probe ~~that is removably insertable into a laser desorption mass spectrometer~~ comprising a substrate having a flat surface and an adsorbent bound to the surface, the adsorbent having a binding characteristic for binding an analyte, wherein a the binding characteristic of the substrate varies in a continuous gradient along one or more linear axes of the probe, wherein the probe is removably insertable into a laser desorption mass spectrometer.

33 (currently amended): The probe of claim 32 wherein the binding ~~characteristics vary~~ characteristic varies in a gradient along one linear axis.

34 (previously presented): The probe of claim 33 wherein the adsorbent is an anion exchange adsorbent and the binding characteristic varies according to charge.

35 (previously presented): The probe of claim 33 wherein the adsorbent is a cation exchange adsorbent and the binding characteristic varies according to charge.

36 (previously presented): The probe of claim 33 wherein the adsorbent is a hydrophilic adsorbent and the binding characteristic varies according to hydrophilicity.

37 (previously presented): The probe of claim 33 wherein the adsorbent is a hydrophobic adsorbent and the binding characteristic varies according to hydrophobicity.

38 (previously presented): The probe of claim 33 wherein the adsorbent is a metal chelate adsorbent and the binding characteristic varies according to valency.

39 (previously presented): The probe of any of claims 32-38 further comprising an analyte bound to the adsorbent.

40 (previously presented): The probe of any of claims 39 further comprising an energy absorbing molecule contacting the analyte.

41-70 (canceled)